

Nov 25 1920.

153,993. OAKDEN'S COMPLETE SPECIFICATION.

( 1 SHEET )

Fig 1.

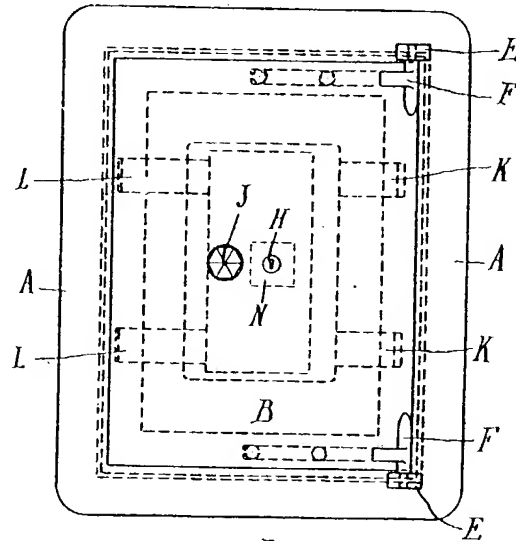


Fig 2.

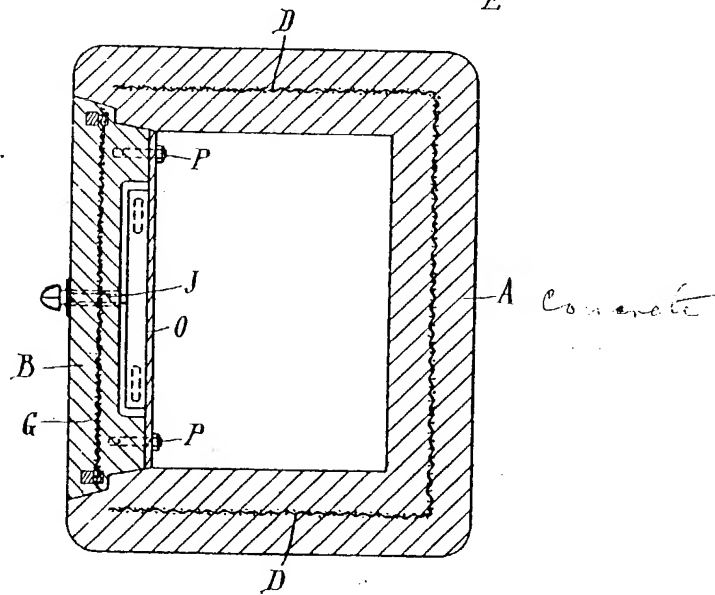
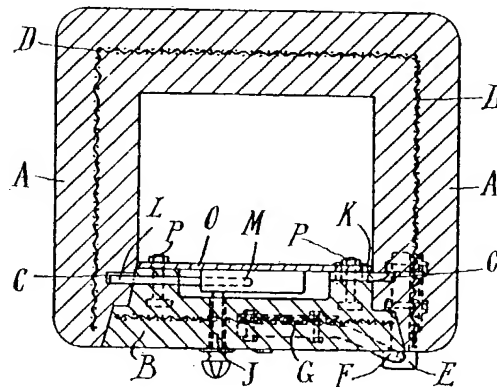


Fig 3.



[This Drawing is a reproduction of the Original on a reduced scale.]

## PATENT SPECIFICATION



Application Date : Sept. 5, 1919. No. 21,833 / 19.

153,998

Complete Left : June 5, 1920.

Complete Accepted : Nov. 25, 1920.

### PROVISIONAL SPECIFICATION.

#### Improvements in the Construction of Safes.

I, ARTHUR HENRY OAKDEN, of Mapperley Mount, in the City of Nottingham, Engineer, do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in the construction of portable safes, and its object is to reduce the cost, and at the same time produce a safe which is efficient as a protection against both fire and burglary.

According to this invention, a portable safe is constructed mainly of concrete suitably reinforced by means of metal, preferably steel, which may be hardened if desired.

The body of the safe is moulded in one piece in a wooden or other suitable mould, and is formed with a rebated opening to admit the door, and with recesses to admit the bolts which are provided for securing the door when closed.

The metal reinforcing members are placed in the mould together with door hinge members, which latter may if desired be secured to the reinforcing member or members, and the concrete is then run in, forming a reinforced concrete safe body integral with metal hinge members to carry the door.

A door with metal hinge members is moulded in a similar manner to the body in a suitably shaped mould, and this door is formed with a keyhole, a hole for the bolt operating spindle, a recess for the bolt plate and bolts, and a recess for the lock.

The bolt plate and lock are preferably held in position by means of metal plates or covers, and the latter may be secured in position by means of screw studs which are moulded in the concrete door. If preferred however screws may be employed for this purpose, and in this case metal parts with screw holes to admit the attachment screws, are moulded in the body of the door.

In some cases the door may be moulded first, and the body subsequently moulded in an inverted position in a mould, the lower part of which is formed by the door itself. In this case the body hinge members are placed in the mould in engagement with the door hinge members, so that when the body is completed, the door is inseparably hinged thereto.

A safe constructed as described may be fitted with a wood or metal lining, and in order to give additional security against fire, a packing of asbestos or other suitable material may be introduced between said lining and the concrete walls.

A safe constructed as described can be made with solid walls of any desired thickness without materially affecting the cost, and the materials used to constitute the concrete can be selected and proportioned so that it will when set, be extremely hard and resist any ordinary means of attack.

Dated this 4th day of September, 1919.

H. C. SHELDON,  
63, Long Row, Nottingham,  
Agent for the Applicant.

### COMPLETE SPECIFICATION.

#### Improvements in the Construction of Safes.

I, ARTHUR HENRY OAKDEN, of Mapperley Mount, in the City of Nottingham, Engineer, do hereby declare the nature of this invention and in what

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manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in the construction of concrete portable safes, and its object is to reduce the cost, and provide a safe which is efficient as a protection against both fire and burglary.

According to this invention, a portable safe made of reinforced concrete is constructed with the door inseparably hinged to the body, by casting one part, either the door or body, in a mould which is partially formed by the other part.

Referring to the accompanying drawings.

Fig. 1 is a front elevation, Fig. 2 a vertical cross section, and Fig. 3 a sectional plan of a safe constructed according to my invention.

Like letters indicate like parts throughout the drawings.

The body A of the safe is moulded in one piece in a wooden or other suitable mould, and is formed with a rebated opening to admit the door B, and with recesses C (see Fig. 3) to admit the bolts which are provided for securing the door B when closed.

The metal reinforcement D is placed in the mould together with metal hinge members E, which latter may if desired be bolted or otherwise secured to the reinforcement D, and the concrete is then run in, forming a complete reinforced concrete safe body A, integral with metal hinge members E to carry the door B.

The door B is moulded in a similar manner to the body with metal reinforcement G, hinge members F which may be secured to the reinforcement G, a keyhole H, (see Fig. 1), and a hole for the bolt operating spindle J.

The locking mechanism which may be of the same type, as that usually employed, and consists of two fixed bolts K two movable bolts L, carried by a sliding plate M, and a lock N, are all carried by a detachable metal plate O, which is secured to the inner side of the door B, by means of studs P or the like, which are moulded in the door.

The locking mechanism may be disposed on either side of the fixed plate O, and when it is disposed between said plate

and the body of the door B as shown in the drawings, the inner face of the latter is recessed to admit the respective parts.

In constructing the safe the door B may be moulded first, and the body A subsequently moulded in an inverted position in a mould, the lower part of which is formed by the door B itself. In this case the body hinge members E are placed in the mould in engagement with the door hinge members F, so that when the body A is completed, the door it inseparably hinged thereto. If preferred the process may be reversed, that is, the body A moulded first and the door B subsequently moulded in position.

A safe constructed as described may be fitted with a wood or metal lining, and in order to give additional security against fire, a packing of asbestos or other suitable material may be introduced between said lining and the concrete walls.

The safe can be made with solid walls of any desired thickness, without materially affecting the cost, and the materials used to constitute the concrete can be selected and proportioned so that it will when set, be extremely hard and resist any ordinary means of attack.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A concrete safe constructed with the door inseparably hinged to the body by moulding one part in a mould which is partly formed by the other part so that the hinges can be placed in engagement before the last part is moulded.

2. In a safe constructed of concrete as set forth in Claim 1, carrying the door locking mechanism on a plate which is secured to the inner face of the door after the latter is moulded.

3. The combination and arrangement of parts constituting the complete safe substantially as herein described and illustrated in the accompanying drawings.

Dated this 4th day of June, 1920.

H. C. SHELDON,  
63, Long Row, Nottingham,  
Agent for the Applicant.